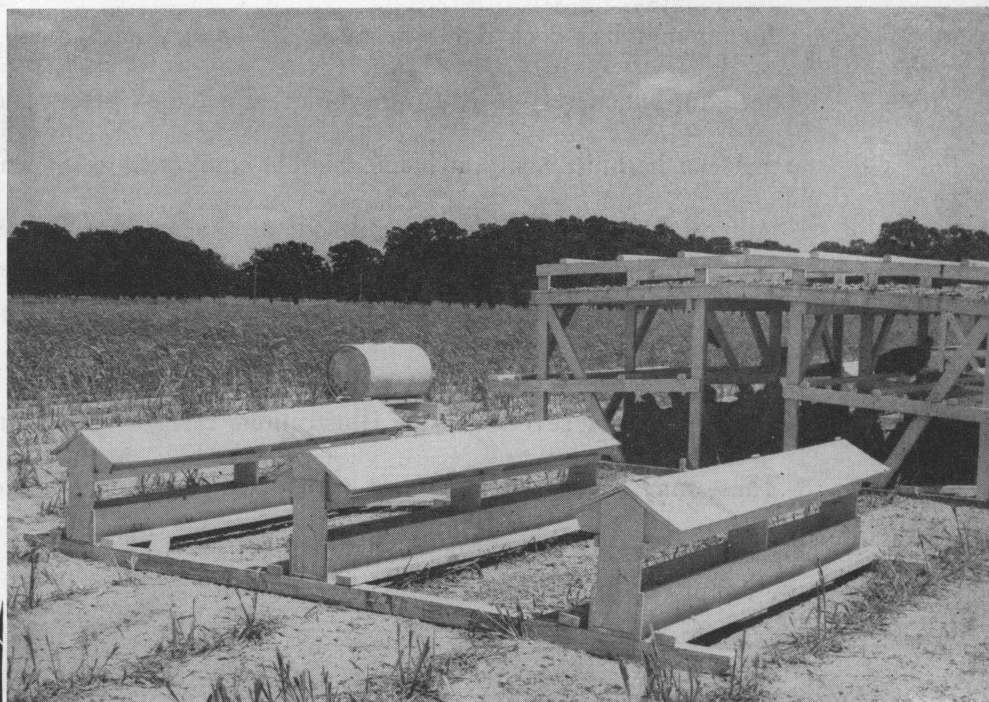


# POULTRY YARD EQUIPMENT



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Agricultural Extension Service

Texas A. & M. College System

G. G. Gibson, Director, College Station

# **POULTRY YARD EQUIPMENT**

By

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No attempt has been made to cover all poultry equipment in this bulletin, but merely to illustrate the more common pieces and those that can be built easily at home. Simple equipment as shown in the bulletin helps to take much work out of the poultry business and makes the work more enjoyable as well as more profitable.

The legends of several of the illustrations refer to other bulletins. These may be obtained from county agricultural and home demonstration agents.





Interior view of brooder house, showing arrangement of equipment and a wire floor.

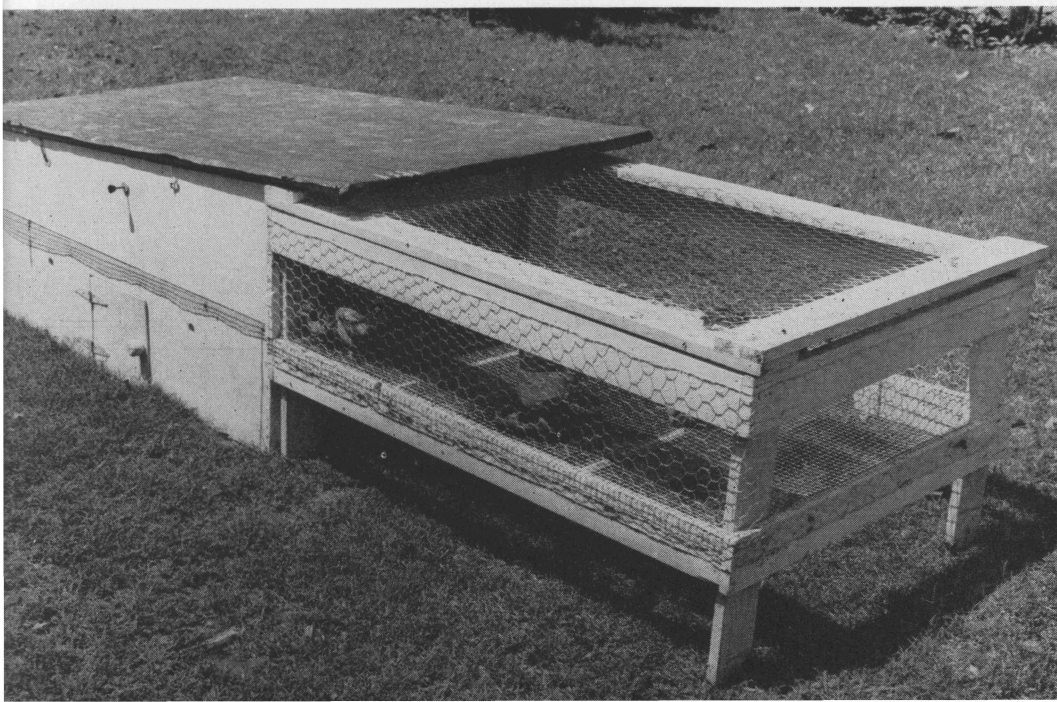


## BROODERS

There are various types and makes of brooders in use in Texas. Electric, gas, wood and kerosene are some of the more popular types. Many of them are built on the farm out of available materials and are relatively inexpensive. Commercial hoovers are known for

their economy of operation. Plans for home-made lamp and electric brooders may be obtained from the Texas Extension Service.

Wire floors are used in brooder houses to prevent the birds from coming in contact with droppings.



Chicks can be brooded conveniently in a lamp brooder. Ask for Extension Plan No. 225.



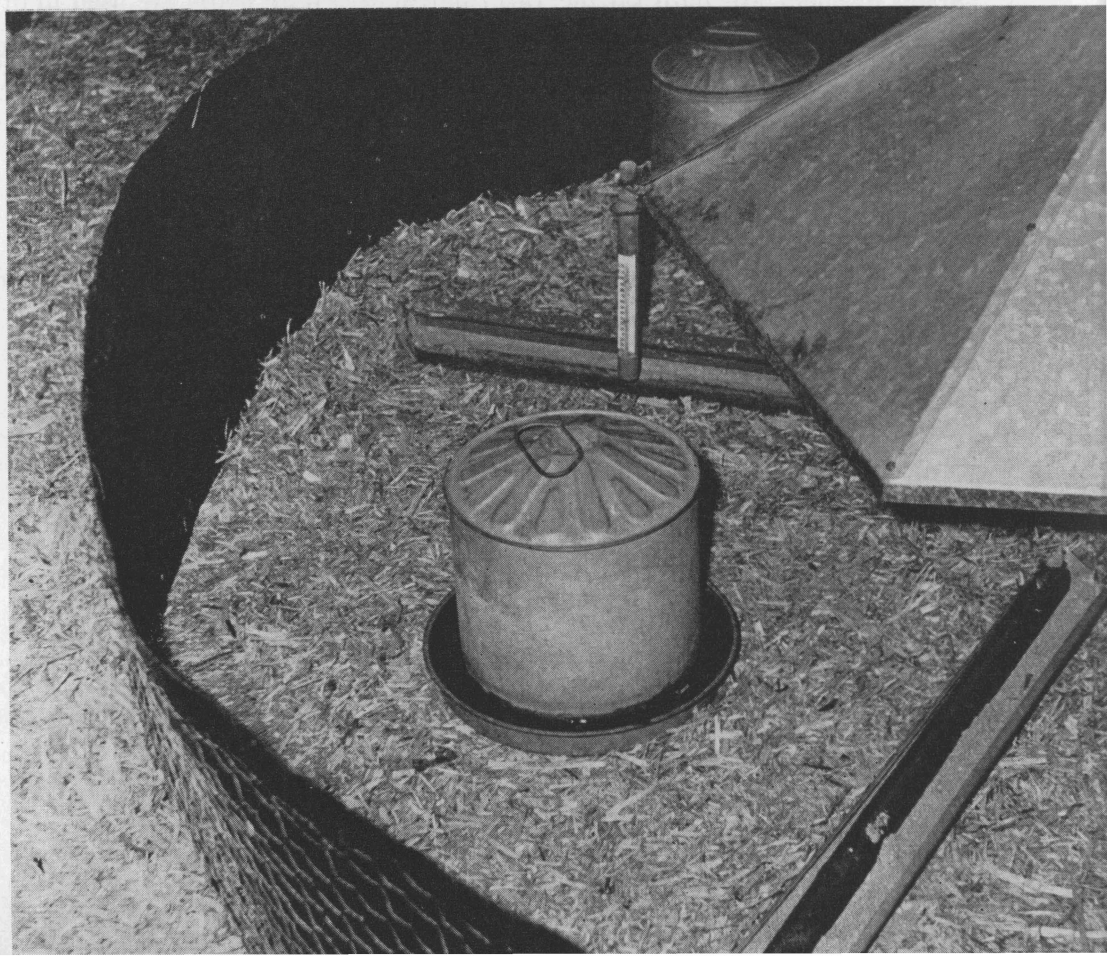




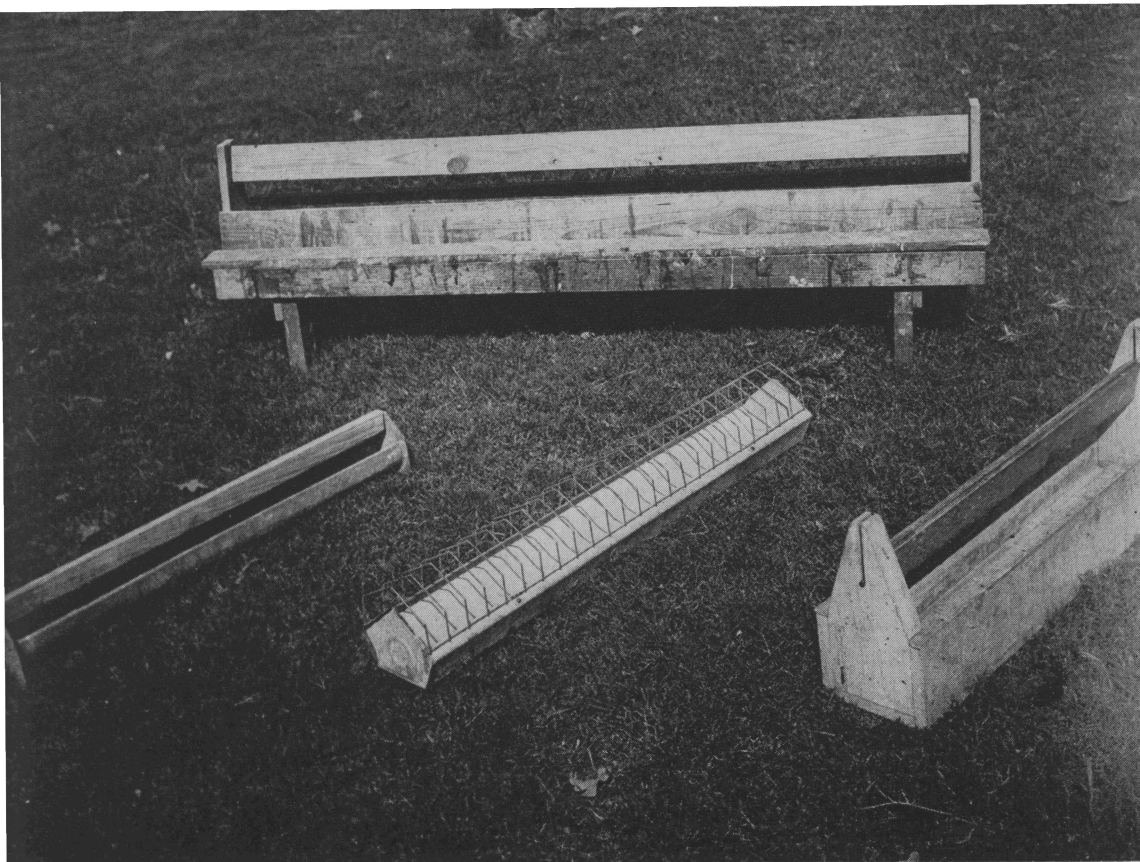
This brooder house is properly ventilated and built on skids for convenience in moving. Plans for construction are available in Texas Extension Bulletin B-65, POULTRY HOUSES FOR TEXAS.



A typical arrangement of brooder canopy, feeders, waterer and guard rail for starting baby chicks. Note thermometer on canopy, and litter on floor.







Three of these hoppers were made on the farm and are of different sizes to care for various size birds. In the center is a wire-covered commercial hopper that can be adjusted to the size of the fowl.

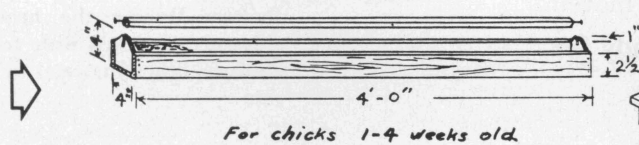
## FEED HOPPERS

Proper feeding equipment is essential on any poultry farm.

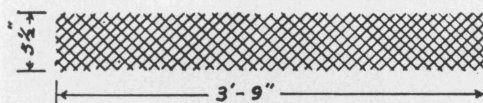
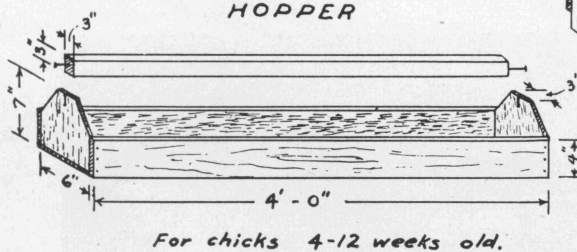
A feed hopper that is properly built eliminates waste.

These line drawings show the detailed dimensions for building feed hoppers on the farm.

SMALL HOPPER

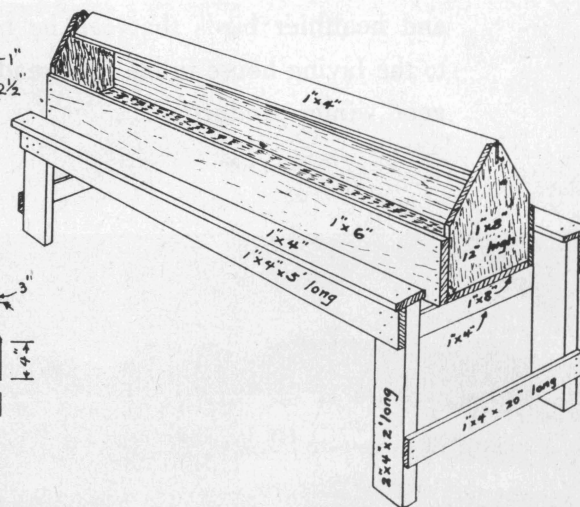


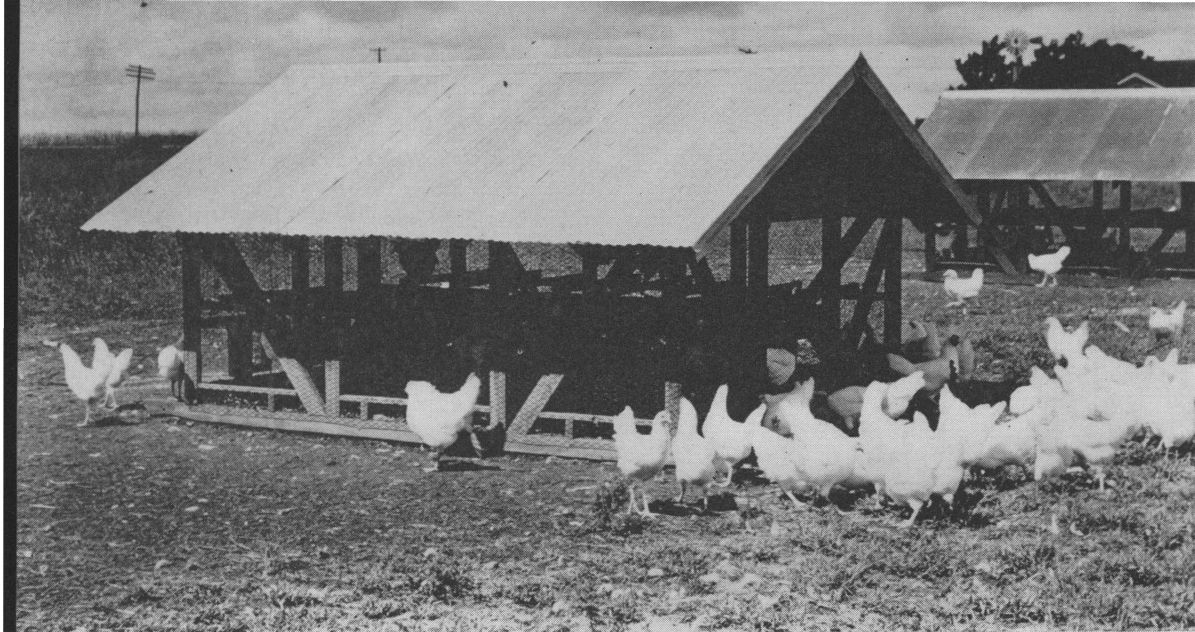
HOPPER



WIRE MESH

Lay loose on top of feed in hopper.



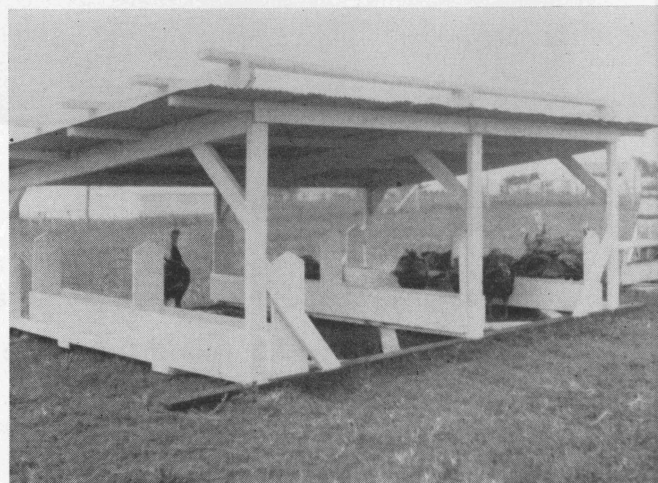


Range shelters are excellent for developing pullets. Place the shelters on clean range away from the mature stock. Plans are available in Extension Bulletin B-65, POULTRY HOUSES FOR TEXAS.

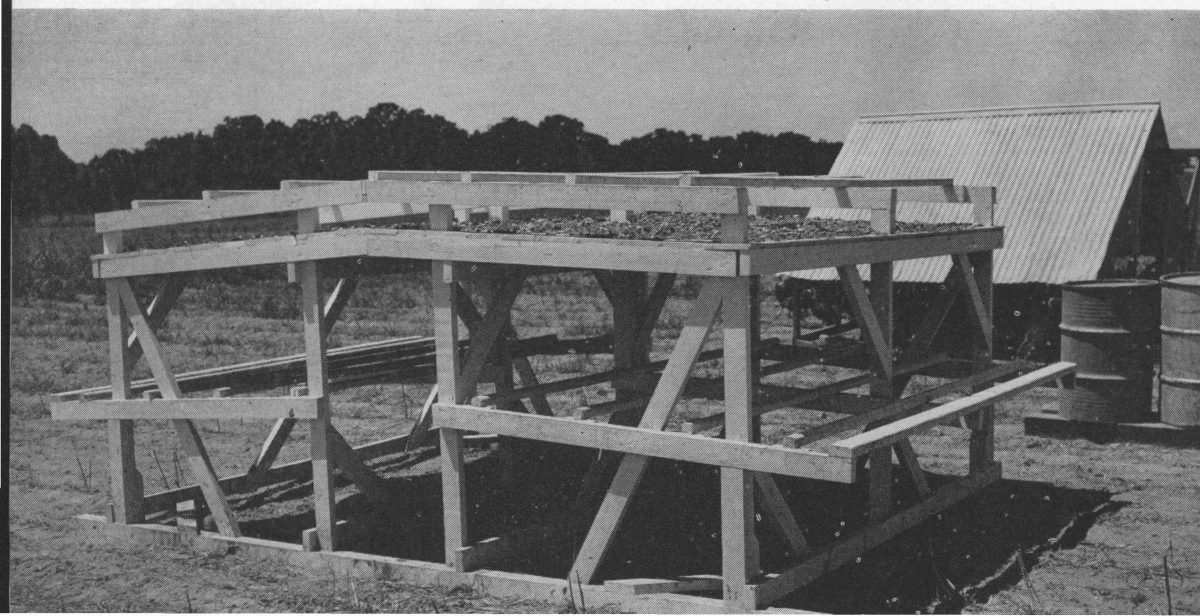


## RANGE SHELTERS

Large and small poultry flock owners are finding that shelter houses are almost essential for the proper development of pullets. A range shelter is inexpensive, is light in construction and can be easily moved. It will serve as a comfortable shelter for growing birds during the summer, enabling the flock owner to develop birds on clean ground, separated from the old flock. This means stronger and healthier birds that can be moved to the laying house in the fall, ready for good winter production.



Combination brooder house and range shelter. During the brooding period, the sides are enclosed with frames covered with cloth or other material to keep out cold and rain.



A range shelter that is excellent because of its double capacity, as the birds can roost under the shelter in hot weather and use the roof for night roosting.



A well constructed house, with adequate ventilation, ideally located near trees for shade.



## FOR COMFORT AND HEALTH

One of the essentials in poultry house construction for Texas has been the comfort of the birds. Proper ventilation insures comfort during the extremely hot summer days. Birds that have adequate room in the poultry house will be more comfortable and more sanitary. A house of adequate size makes it easier to maintain clean litter on the floor; dropping pits also aid the health of the birds.



Dropping pits add to the comfort of chickens and are a decided factor in reducing colds. Dropping pits are cheaper to build than the old type dropping boards.



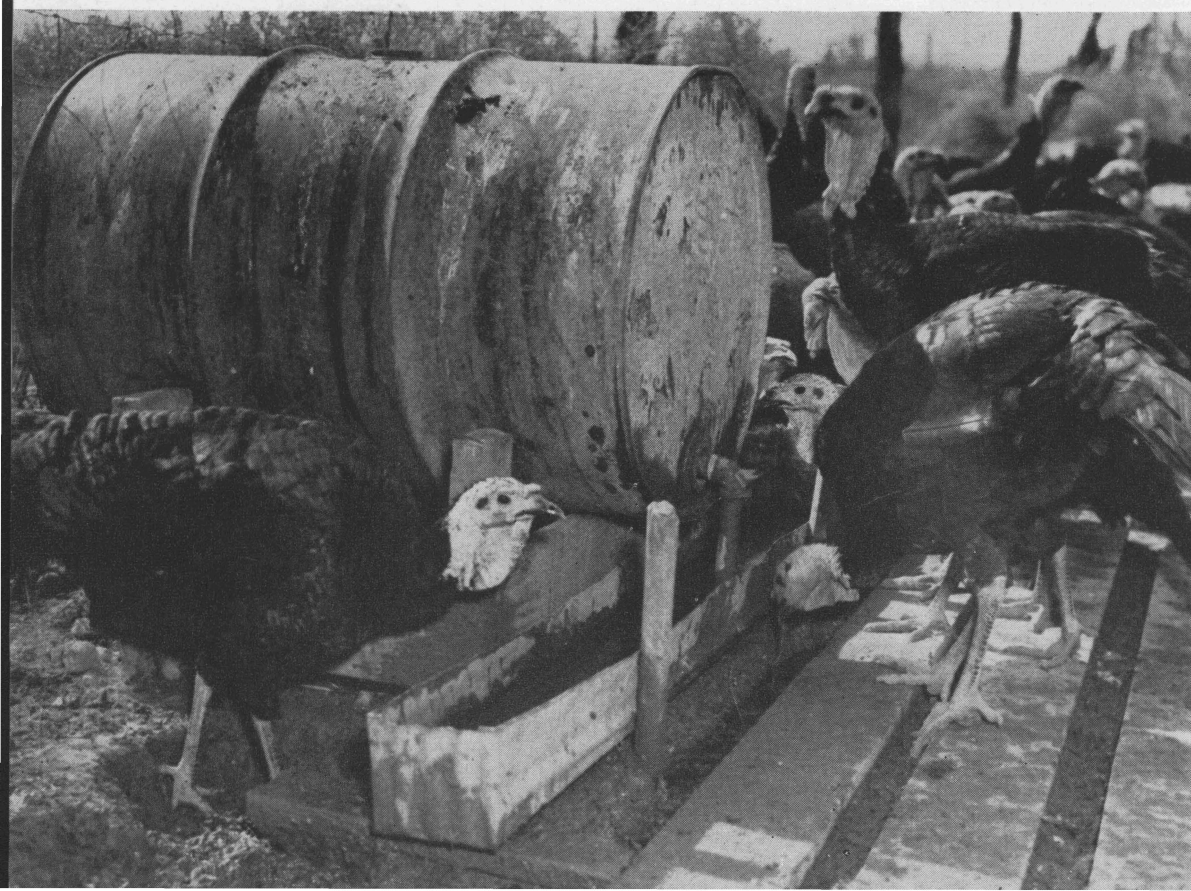
This wooden barrel is ideal for storage of water as water will remain cool for long periods of time. Metal containers absorb heat.



## WATERERS

Either of these range watering devices are easy and economical to construct. Plenty of clean, cool water on the range

is a very important item in the growing out of birds. Plans may be obtained from the Texas Extension Service.



Time and labor is saved if large storage containers are used for water; operating expenses will be less.





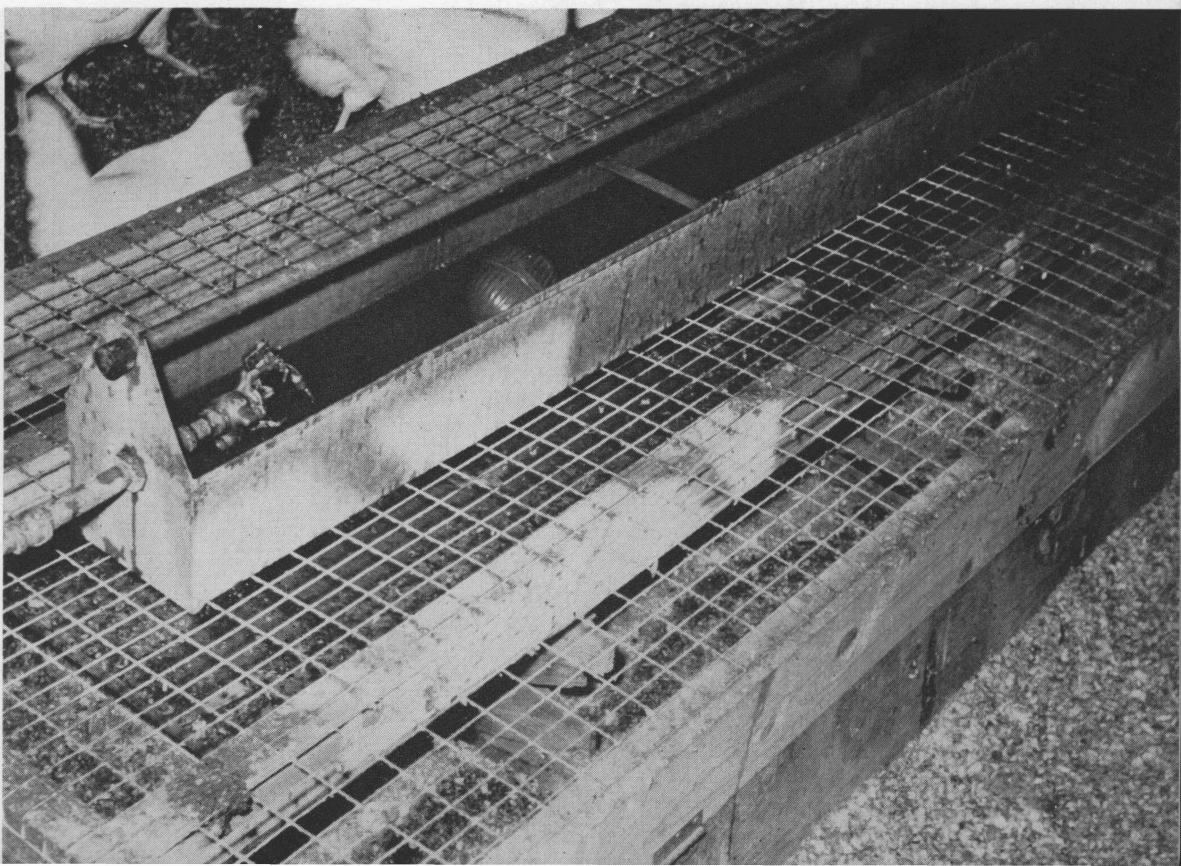
A handy watering device, with the bucket set on a frame and drip box, Such a frame is easily built at home.



Good, clean water is as essential to poultry production as any other part of the feeding program. Water containers should be thoroughly scrubbed each day and disinfected with

a good disinfectant once each week. A sturdy, galvanized bucket that can be cleaned and disinfected easily makes an excellent container for water.

An automatic watering device. Such a float valve may be used in a large galvanized bucket if desired.







Here are the different types of waterers which may be used. All are satisfactory.



## **WET MASH AND OYSTER SHELL HOPPERS**

Wet mash hoppers may be built of 1"x4" material and placed in the poultry house at the time of feeding. These hoppers should be removed and cleaned immediately after the wet mash feeding.

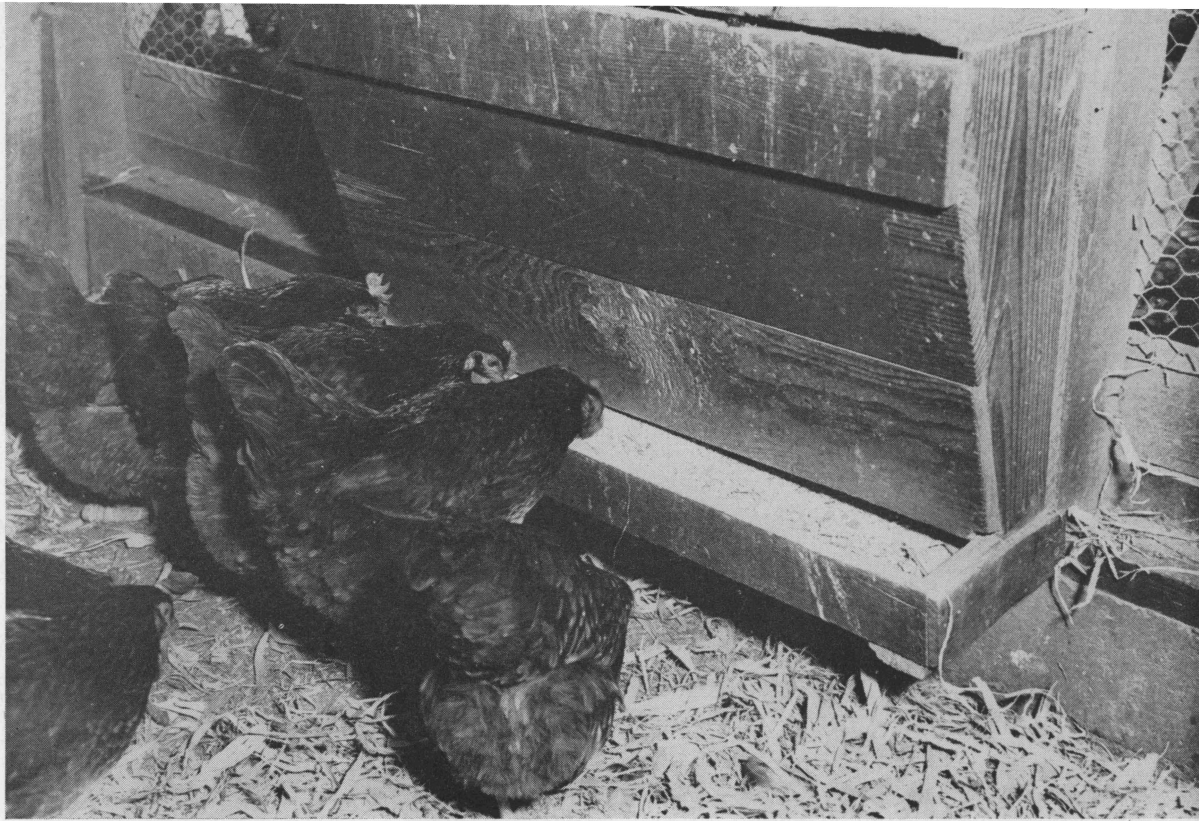


This wet mash trough was made of 1"x4" lumber and can be made any desirable length to fit the needs of the flock.



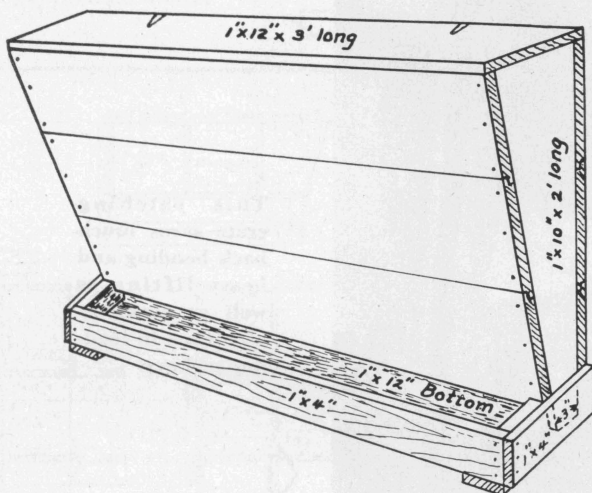


Oyster shell and grit are important in poultry feeding. A convenient hopper for feeding the necessary ingredients is shown. The free choice feeding system has been very successful.

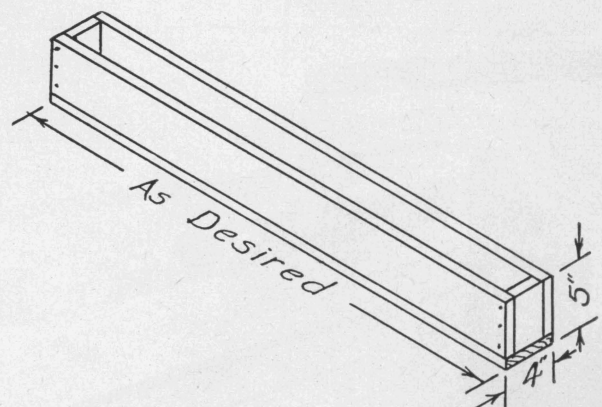


Chickens need mineral just as any other form of livestock. Many poultrymen do not feed oyster shell because they think their mash feed contains a sufficient amount of mineral material to take care of the needs of the birds.

This is a mistake that quite often leads to losses in the poultry flock. A small hopper to hold oyster shell can be easily built and placed against the wall in some convenient place where the chickens can have access to it as their individual appetites demand.



This line drawing shows detailed dimensions for building the oyster shell hopper for free choice feeding.



Line drawing for the wet mash hopper shown on page 10. Length can be adjusted to fit needs of the flock.



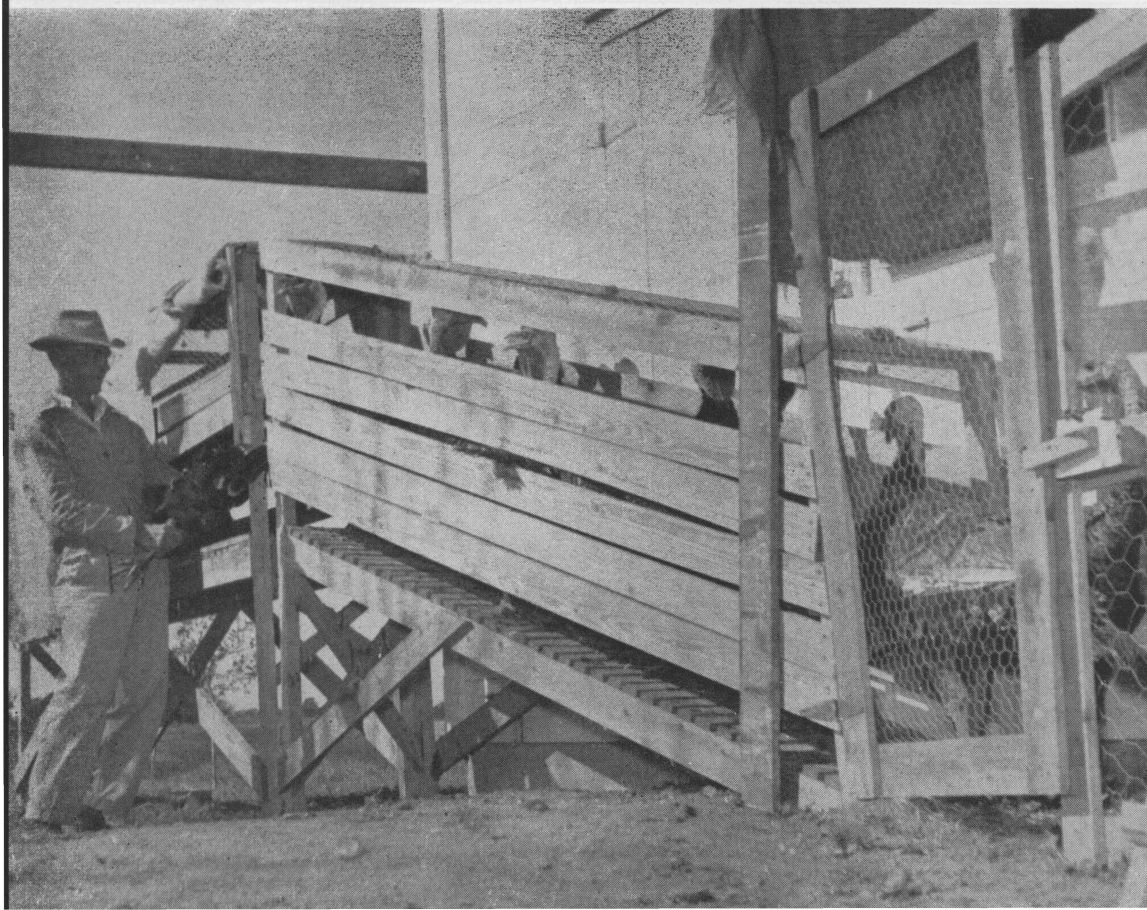
Crates may be made, as the one shown here, out of wood, or they may be bought from commercial concerns. Care should be taken to protect wooden crates from the weather.



## CATCHING CRATES

Catching crates are easily built on the farm and save time and labor. No poultry farmer should be without one. The size may be varied to suit. These

crates are easy on the birds and also on the poultryman. Commercial crates are collapsible and easily stored.



This catching crate saves much back bending and heavy lifting as well as considerable time in loading turkeys.





There should be one nest for every five hens. Nests should be built so as to allow air to circulate around them, thus adding to the comfort of the birds.



## NESTS

Comfort is one of the essentials of a good poultry house. This applies also to the nests. Nests that are built to give proper ventilation add to the comfort of the birds and also reduce death losses during the summer. The nests should be at least four inches from the wall to allow air to circulate around

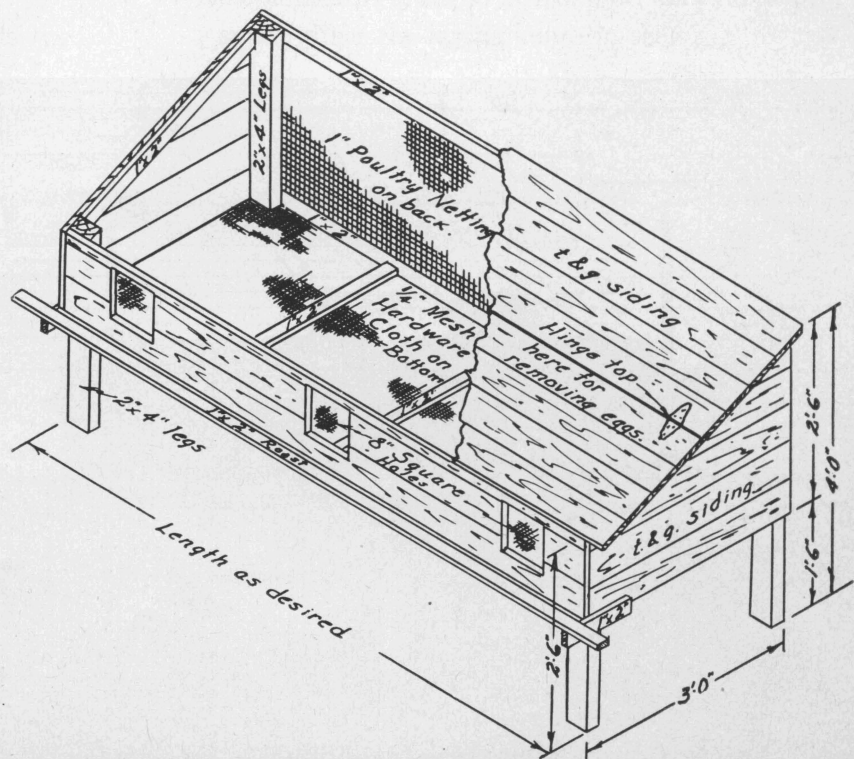
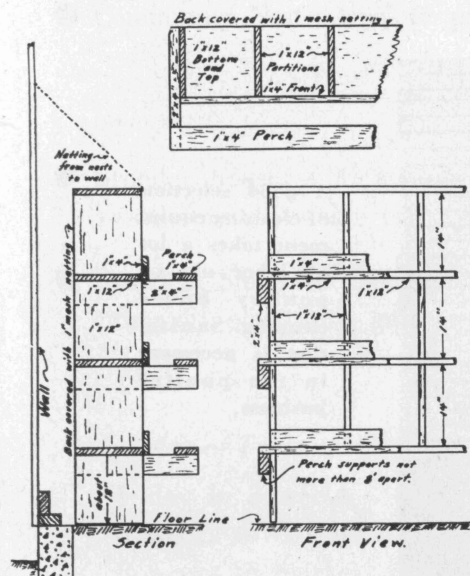
them. The backs may be slatted or covered by wire and the bottoms may be made of wire to allow a complete circulation of air in and around the nests at all times.

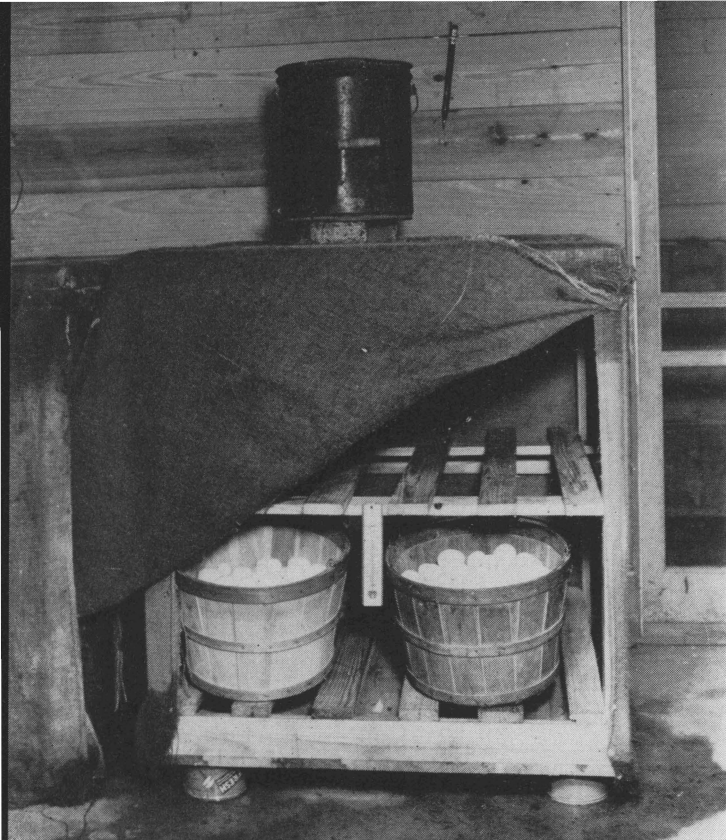
Clean, comfortable nests will mean fewer floor eggs and cleaner market eggs.

Line drawing, showing the dimensions of the nests in the photograph above.



Community nests are becoming more popular because they utilize all nest space in the poultry house. One foot of nest space in a community nest is recommended for every five hens.

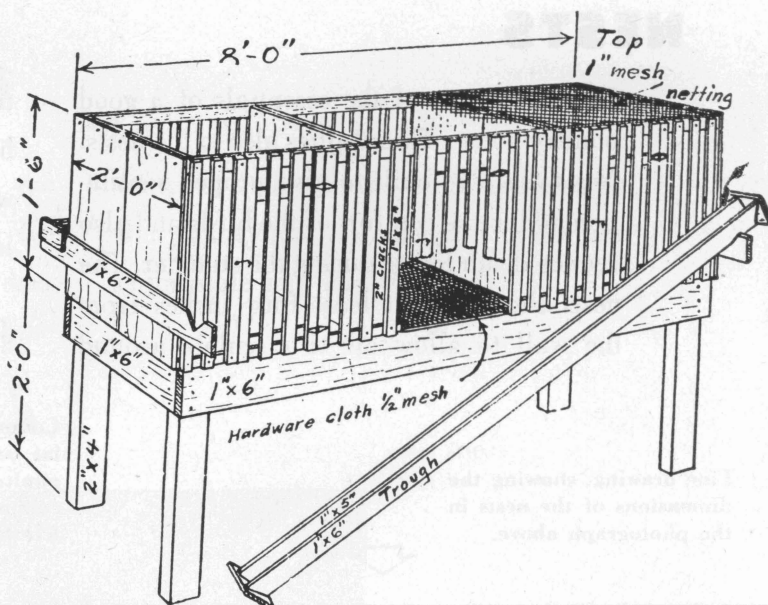




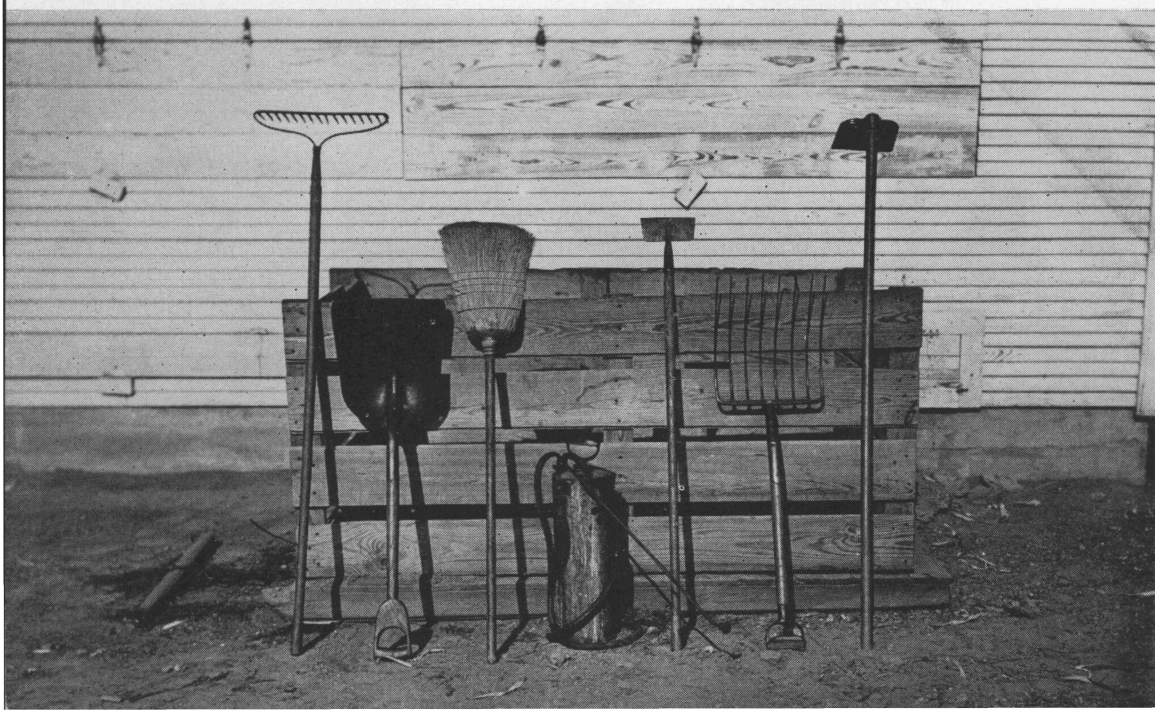
The evaporative type of cooler is handy for holding eggs in the summer time and helps the poultryman to market high quality eggs. The capacity of the cooler shown here is four cases of eggs. Wire baskets are more desirable for maximum cooling efficiency.



Handy fattening coop for fattening old hens and roosters for the market. The line drawing gives the detailed dimensions for building the coop.



The equipment shown on this page will add to the efficiency of the poultry enterprise. The fattening coop is desirable, as birds that are culled from the flock may be placed in it and fattened for the market, thereby bringing more profit.



A good selection of cleaning equipment takes a lot of labor out of poultry house cleaning. Sanitation is necessary in the poultry business.





# GENERAL RECOMMENDATIONS

## BROODER EQUIPMENT FOR 100 CHICKS

- *Brooder House*—One brooder house allowing at least  $\frac{1}{2}$  square foot floor space per chick and one 10' x 10' range shelter.
- *Brooder*—One standard canopy type brooder that will supply adequate heat and operate successfully under variable weather conditions. Allow at least 7 sq. in. space per bird under hover.
- *Watering Devices and Feeder Space*—Automatic watering device is recommended. If automatic watering device is not available, then supply the following amount of watering equipment: Four  $\frac{1}{2}$  gallon waterers for first four weeks; four 1 gallon waterers from four to twelve weeks. Two 5 gallon water fountains per 100 pullets. One inch feeder space per chick first six weeks. Two inches feeder space per chick six to twelve weeks. Three inches of feeder space per pullet thereafter.
- *Range Shelter*—Pullets should be moved from brooder house to range shelter when they are from ten to twelve weeks of age. Provide one 10' x 10' range shelter per 100 pullets.

## EQUIPMENT FOR 100 LAYING HENS

- *Laying House*  
Hens kept in confinement, 20' x 20' house (4 sq. ft. per bird).  
Hens on free range, 16' x 20' house.  
24 feet is maximum width suggested for larger units. Any length of house may be used if sections or walls are put in each 30 feet to prevent excessive draft.
- *Nests*—Twenty—One for each five hens, 12 x 14 inches, 12 inches high.
- *Community Nest*—1 sq. ft. per 5 birds.
- *Roosts*—Sixty-seven linear feet—8 inches for each hen.
- *Feeder Space*—Twenty-five feet—three inches for each hen.
- *Waterers*—Five to eight gallons for each 100 hens.
- *Yard Space*—Laying hens that are properly fed and watered will not range over 150 feet from the house. In order to utilize more of your yard space, place the laying house in center.

## EQUIPMENT FOR 100 TURKEYS

- *Brooder house*: 100 square feet floor space. Ventilation adjustable for use as range shelter.
- *Brooder*: Standard canopy type brooder using either oil, electricity, gas, or coal. Diameter of canopy should be forty inches. Temperature should be same as for chicks.
- *Feeding and watering equipment*.

### *Age of Turkeys*

1 day to 3 weeks  
3 weeks to 8 weeks  
8 weeks to market

### *Feeder Space*

2 inches per bird  
4 inches per bird  
6 inches per bird

### *Water Space*

Four 1-gallon fountains  
Four 3-gallon fountains  
Four 5-gallon fountains  
(or field watering device)

## BLUEPRINTS

No.			
86	Shed-roof poultry house, 10'x10', capacity, 25 birds	298	Sun porch for turkeys 10'x12', capacity, 120 poults.
111	Movable brooder house, 8'x12', shed roof.	305	Brooder and range house.
113	Poultry house, 24'x24', capacity, 200 birds.	310	Turkey range feeder.
115	Trap Nest Details.	327	Poultry waterer, 50 gal. capacity.
116	Poultry house, 18'x18', capacity, 100 birds.	332	Trap nest for turkeys.
120	Poultry house, 20'x30', capacity, 200 birds.	335	Springer laying house.
123	Movable brooder house, 10'x20', 200-500 chicks.	340	Brooder house, 2400 bird capacity.
163	Semi-monitor poultry house, 19'x30'.	343	Poultry laying house (concrete block), 10'x12'.
166	Movable brooder and range house, 12'x12', capacity, 300 chicks.	344	Poultry laying house (concrete block), 20'x40'.
167	Poultry house, 14'x14', capacity, 65 birds.	352	Poultry laying house, capacity 500 birds.
168	Poultry house, 18'x18', capacity, 100 birds.	354	Community nest.
170	Poultry range shelter, 10'x10'.	5291	Brooder house, 16'x36', 3 units, 500 chicks per unit.
173	North Plains poultry house, 18'x18'.	5431	Portable brooder house, 12'x14', 500 chicks.
222	Movable poultry range shelter, 8'x10'.	5487	Adobe laying house, 22'x43', two units.
225	Homemade lamp brooder, capacity, 60 chicks.	5488	Metal laying house, 20'x20', nest and roost details.
234	Knock-down poultry house, 16'x20', capacity, 100 hens.	5580	Poultry laying house, 20'x40', 2 pens, 100 hens each pen.
244	Range feeder for poultry, weather-proof.	5581	Poultry house, 20'x20', 100 birds.
262	Broiler house, 16'x18', or larger, capacity, 500 birds.	5582	Poultry house, 20'x50', capacity, 200 birds.
279	Battery brooder house, 20'x20'.	5583	Electric brooders, capacity, 200 chicks.
285	Homemade battery brooder, capacity, 200 chicks or 100 broilers.	5585	Movable brooder house, 12'x14', capacity, 400 day-old chicks.

## PUBLICATIONS

- B-65 Poultry Houses for Texas
- C-163 Growing Baby Chicks
- C-260 Keep Hens Happy
- C-241 Poultry Production Guide for Texas

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